

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
AUSTIN DIVISION**

UMG RECORDINGS, INC., *et al.*,

Plaintiffs,

vs.

GRANDE COMMUNICATIONS  
NETWORKS LLC and PATRIOT MEDIA  
CONSULTING, LLC.,

Defendants.

§  
§  
§  
§  
§  
§  
§  
§  
§  
§

Civil Action No. 1:17-cv-00365-DAE-AWA

**PLAINTIFFS' OPPOSITION TO DEFENDANT  
GRANDE COMMUNICATIONS NETWORKS LLC'S MOTION TO EXCLUDE  
PROPOSED EXPERT TESTIMONY OF BARBARA FREDERIKSEN-CROSS**

## INTRODUCTION

Barbara Frederiksen-Cross is a highly qualified expert in the design, development, and analysis of computer software and computer forensics. Rightscorp developed and operates computer software that has detected rampant copyright infringement by Grande's subscribers using the peer-to-peer file-sharing program BitTorrent. Frederiksen-Cross has independently examined Rightscorp's computer code, the data it recorded, the notices of infringement that it generated and sent to Grande, and the process it employs for downloading entire copies of infringing audio files from Grande subscribers. She has also tested Rightscorp's system by, with Plaintiffs' permission, sharing certain copyrighted works and confirming that Rightscorp accurately detected, recorded, and created notices of that infringing activity. Her analysis demonstrates that Rightscorp generates accurate data about BitTorrent users and the copyrighted works they illegally share. In *BMG Rights Management (US) LLC v. Cox Communications, Inc.*, No: 1-14-cv-01611 (E.D. Va.), the court allowed her to present materially identical trial testimony in December 2015.

Grande has not identified any inaccuracies in the Rightscorp notices. Indeed, Frederiksen-Cross's opinions are consistent with the evidence that (1) in the ordinary course of business, Grande personnel did not have any concerns that the 1.35 million Rightscorp notices Grande received were inaccurate,<sup>1</sup> and (2) after the jury verdict against Cox, Grande began terminating subscribers for whom it had received Rightscorp infringement notices.<sup>2</sup>

Grande nonetheless has concocted a litigation stance that Rightscorp's system and its outputs are unreliable.<sup>3</sup> Its motion to exclude Frederiksen-Cross' testimony is part and parcel of

---

<sup>1</sup> See Pls.' Mot. for Partial Summ. J. as to DMCA Safe Harbor Defense at 15-16 [Dkt. 127].

<sup>2</sup> *Id.* at 16-17.

<sup>3</sup> *Id.* at 15.

this after-the-fact legal strategy. But none of Grande's exclusion grounds has any merit. First, far from providing *ipse dixit* opinions, Frederiksen-Cross's testimony is well-supported by abundant evidence. Second, Grande raises speculative claims about the accuracy of Rightscorp's notices, but again, these unsubstantiated critiques are not grounds for excluding Frederiksen-Cross's opinion and can be addressed (if at all) through cross-examination. Third, the Court should not exclude testimony that accurately uses the terms "infringement" and "repeat infringement" when describing Rightscorp's system and notices. Fourth, Frederiksen-Cross is more than qualified to explain, as essential context for her opinions, the uncontradicted background facts regarding how BitTorrent works. Fifth, for the reasons Plaintiffs previously explained, the Court should deny Grande's repeated argument that Frederiksen-Cross's rebuttal report should be stricken.

### **BACKGROUND**

Frederiksen-Cross is an expert in computer forensics and the design, development, and analysis of computer software.<sup>4</sup> She has 44 years of experience in the computer industry and has held numerous positions, including software development consultant, systems analyst, database administrator, programmer, and forensic software analyst, for several employers in the public and private sector.<sup>5</sup> She has been retained hundreds of times as a consultant or as a testifying expert.<sup>6</sup> Her litigation engagements include copyright, patent, and trade secret litigation, and cases involving consumer protection, failed software development efforts, and criminal law enforcement investigations and prosecutions.<sup>7</sup> She has testified in court in over 20 cases, including in *Cox*.<sup>8</sup>

In this case, the purpose of Frederiksen-Cross's testimony is to confirm whether

---

<sup>4</sup> Ex. 1, B. Frederiksen-Cross Expert Report ("F-C Rpt.") Ex. A at 1 (Frederiksen-Cross CV).

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*; Ex. 2, B. Frederiksen-Cross Deposition ("F-C Dep.") 20:9-23:25.

<sup>8</sup> Ex. 1, F-C Rpt. Ex. A at 9-11.

Rightscorp's data is accurate. She analyzed the computer code for Rightscorp's system, together with the data the system collects and generates; interviewed Rightscorp's personnel, including its founder and chief programmer Greg Boswell; and examined testimony and documentary evidence regarding the system's functions. Applying her extensive expertise, she has described how the system operates and has determined that Rightscorp effectively identifies online copyright infringers using BitTorrent and accurately detects sharing of copyrighted works. She even tested the Rightscorp system herself to confirm that it was able to detect infringing conduct. She performed a similar analysis with similar results in *Cox* – all of which she was permitted to present to the jury.<sup>9</sup>

Frederiksen-Cross's rebuttal report responds to criticisms by Grande's computer expert, Geoff Cohen. But Cohen has not identified a single inaccurate data point in Rightscorp's data, nor has he pointed to a single error in any infringement notice.<sup>10</sup> His report instead raises untested hypotheticals and quibbles with Frederiksen-Cross's description of Rightscorp's code. Her rebuttal report also corrects some minor, immaterial errors and omissions in her initial report, again in response to Dr. Cohen's criticisms.

### LEGAL STANDARD

“[T]he rejection of expert testimony is the exception rather than the rule,” Fed. R. Evid. 702, Adv. Cmte. Notes (2000), and a qualified expert's testimony is admissible whenever it is relevant and reliable, *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 597 (1993). The *Daubert* standard is flexible and grants courts wide latitude in how to determine reliability; accordingly, expert testimony is admissible even where it does not satisfy each *Daubert* factor. *United States v. Hicks*, 389 F.3d 514, 525 (5th Cir. 2004). Nor does testimony become

---

<sup>9</sup> *Id.* at ¶¶ 43-86, 88-99; *id.* at Rpt. Ex. D (describing code processes).

<sup>10</sup> Ex. 3, Frederiksen-Cross Rebuttal Expert Report (“F-C Rbtl. Rpt.”) ¶ 36.

“unreliable,” and therefore inadmissible, merely because an opposing party raises analytical criticisms or challenges the accuracy of the opinion’s underlying data, as those criticisms “go to probative weight rather than to admissibility.” *Tyler v. Union Oil Co. of California*, 304 F.3d 379, 392 (5th Cir. 2002); *see also Fortune Prod., Inc. v. Bass Pro, Inc.*, No. A-11-CV-1006-LY, 2013 WL 12076932, at \*2 (W.D. Tex. Sept. 11, 2013) (denying a *Daubert* motion; “vigorous cross-examination, presentation of contrary evidence, and careful instruction on burden of proof are means of attacking evidence”).

## ARGUMENT

### **I. FREDERIKSEN-CROSS’S TESTIMONY ABOUT RIGHTSCORP’S SOFTWARE IS RELIABLE AND ADMISSIBLE.**

Grande seeks to exclude Frederiksen-Cross’s testimony that Rightscorp’s software accurately detects and records copyright infringement for essentially two reasons, both of which the Court should reject. Mot. at 2-6. First, Grande asserts that Frederiksen-Cross’s testimony is merely “*ipse dixit*” because she relies on the testimony of Rightscorp’s founder, Greg Boswell. But the opposite is true. Rather than simply “saying so,” Frederiksen-Cross grounds her well-founded opinions on abundant factual support. She has applied her significant technical expertise to independently confirm that Rightscorp’s software operates as its personnel, including Mr. Boswell, has explained, by extensively reviewing Rightscorp’s 2015 computer code provided to her in *Cox* and updated code provided in 2018.<sup>11</sup> She has summarized in great detail how the software’s constituent functions operate.<sup>12</sup> And she has substantiated her conclusion that the code accurately identifies copyrighted works made available for download, accurately collects relevant identifying information, and generates notices that convey that accurate information—including

---

<sup>11</sup> Ex. 1, F-C Rpt. ¶¶ 43-86.

<sup>12</sup> *Id.* at Ex. D (describing code processes).

by actually testing that software.<sup>13</sup> This analysis is quintessential expert testimony.

Grande nonetheless makes the curious argument that Frederiksen-Cross's code analysis is infirm because certain "functions are manually executed" by Mr. Boswell, Mot. at 3, and therefore she conferred with the creator of the code on how it operates. Frederiksen-Cross has analyzed and explained how the relevant functions within Rightscorp's system operate.<sup>14</sup> But to understand which specific function is being engaged in which circumstances, it is typical in the industry to rely on explanations from the software code's drafters.<sup>15</sup> Grande points to no reason (let alone authority) for its claim that reliance on such information is improper. If Grande wants to challenge Frederiksen-Cross's reliance on information from Rightscorp personnel, it can do so on cross-examination, but that reliance is not a ground for exclusion. *See Wealthmark Advisors Inc. v. Phoenix Life Ins. Co.*, No. SA16CA00485FBESC, 2017 WL 1133506, at \*5 (W.D. Tex. Mar. 24, 2017) ("While Wealthmark may disagree with the facts upon which McAleer bases his analysis, the proper vehicle for Wealthmark to challenge McAleer's opinion is cross-examination.").<sup>16</sup>

Second, Grande asserts that Frederiksen-Cross's testimony is unreliable because Frederiksen-Cross cannot pinpoint how Rightscorp's system operated at any given second during the relevant period. That claim is entirely misleading. Frederiksen-Cross *has* explained how Rightscorp's system operated based on the 2015 and 2018 versions of the code that she reviewed. Grande attempts to transform two acknowledged, and corrected, minor oversights in that explanation into evidence that the task is "impossible." But that is simply not the case. Frederiksen-Cross explained in both her rebuttal report and at deposition that in the newer version

---

<sup>13</sup> *Id.* ¶¶ 18, 124; *id.* ¶¶ 88-99 (describing testing).

<sup>14</sup> *Id.* ¶¶ 43-86; *see also id.* at Ex. D (describing code processes).

<sup>15</sup> Ex. 2, F-C Dep. 64:16-66:1.

<sup>16</sup> *See also Browning v. Sw. Research Inst.*, No. No. SA-05-CA-0245-FB, 2006 WL 6549921, at \*2 (W.D. Tex. Aug. 17, 2006) (quoting *Hartley v. Dillard's, Inc.*, 310 F.3d 1054, 1061 (8th Cir. 2002)) (same).

of the Rightscorp software, the function “Test5.java” was split into two functions because BitTorrent sites were thwarting Rightscorp’s infringement detection, but the newer code was performing the same function and was essentially the same as the prior version despite the slight change in how the Code was engaged.<sup>17</sup> Grande misleadingly cites Frederiksen-Cross’s testimony on this point, Mot. at 3, omitting the remaining portion of her answer on pages 66-67: “What I can tell you is that when I look at the slices in time of the software that I have, [the] differences with respect to anything that would be material to my opinion [are] really pretty trivial and insubstantial –[.]”<sup>18</sup> Regarding the function “Sampleit3,” Frederiksen-Cross’s initial report merely contains a typographical error that she explained and corrected in her rebuttal report and in her deposition.<sup>19</sup> Two small corrections do not render expert opinion unreliable, and therefore inadmissible. *See Wealthmark Advisors*, 2017 WL 1133506, at \*3. The cases Grande cites are not to the contrary.<sup>20</sup>

## **II. FREDERIKSEN-CROSS SHOULD BE PERMITTED TO TESTIFY ABOUT THE RELIABILITY OF RIGHTSCORP’S NOTICES.**

Frederiksen-Cross analyzed Rightscorp’s process for generating infringement notices and repeat infringer notifications, and concluded that this process accurately conveys the information associated with each detected infringement.<sup>21</sup> Grande does not argue that this analysis is unreliable. Instead, it seeks to preclude this testimony for three unavailing reasons. Mot at 6. First, although Grande has not identified any erroneous ownership claims, it argues that

---

<sup>17</sup> Ex. 3, F-C Rbtl. Rpt. ¶ 39; Ex. 2, Dep. Tr. 69:11-74:19.

<sup>18</sup> Ex. 2, F-C Dep. 66:25-67:3.

<sup>19</sup> Ex. 3, F-C Rbtl. Rpt. ¶ 38 (explaining “from a Single Peer” should be “from the selected torrent”); Ex. 2, Dep. Tr. 215:6-17.

<sup>20</sup> In *Jacked Up, LLC v. Sara Lee Corp.*, expert testimony was excluded because an expert’s assumptions were “unsupported by or contradict the evidence at hand,” but no such unsupported assumptions or contradictions exist here. 291 S. Supp.3d 795, 807 (N.D. Tex. 2018). *Johnson v. Arkema, Inc.*, affirmed the exclusion of a scientific expert who did not present sufficient evidence or analysis to justify his conclusion. 685 F.3d 452, 467 (5th Cir. 2012). But Grande points to no lack of evidence that undermines Frederiksen-Cross’s analyses.

<sup>21</sup> Ex. 1, F-C Rpt. ¶¶ 18, 70-77.

Frederiksen-Cross did not confirm with the Copyright Office that each work infringed was owned by Plaintiffs. That inquiry is not within the scope of her engagement or testimony, and Plaintiffs have produced and will present at trial (if necessary) evidence of ownership. Regardless, Grande fails to explain how this issue justifies excluding Frederiksen-Cross's technical analyses.

Second, again without identifying any errors, Grande argues that Frederiksen-Cross did not confirm the identity of each illegally shared work. Though she does explain the process by which Rightscorp uses software to digitally fingerprint the infringing works, the confirmation of the identity of each work is not within the scope of her engagement or testimony—other witnesses will testify on this point for Plaintiffs.<sup>22</sup> Again, Grande provides no basis to exclude this testimony.

Third, Grande argues that Frederiksen-Cross did not personally confirm the accuracy of each and every notice. But again, she described and verified the accuracy of the process by which the data was collected and the notices were generated.<sup>23</sup> In short, none of Grande's unsubstantiated hypotheses present a reason to exclude Frederiksen-Cross's opinions, because each of these speculative quibbles can be addressed through cross examination.

### **III. FREDERIKSEN-CROSS DOES NOT DEFINE LEGAL TERMS OR OFFER LEGAL CONCLUSIONS AND IS PERMITTED TO USE LEGALLY CORRECT TERMINOLOGY.**

Grande requests that “the Court exclude Frederiksen-Cross's opinions on ‘infringement,’ ‘infringers,’ and ‘repeat infringement.’” Mot. at 8. First, she has no such “opinions.” As she explained at her deposition, she uses the term “infringement” because Rightscorp's system uses that terminology.<sup>24</sup> For example, Rightscorp's code previously used a routine called “Infringement Finder,” and Rightscorp generates two types of notices—an “Infringement Notice” and a “Repeat

---

<sup>22</sup> Ex. 1, F-C Rpt. ¶¶ 65-69.

<sup>23</sup> *Id.* ¶¶ 70-77.

<sup>24</sup> Ex. 2, F-C Dep. 88:9-89:25 (“I have used the terms that Rightscorp uses in describ[ing] an infringement or an infraction because those are terms that are used in the software and are used by Rightscorp”); *id.* at 154:16-155:2.



Infringer Notification.”<sup>25</sup> Frederiksen-Cross explained that her opinions do not depend on the legal definition of “infringement.”<sup>26</sup> In addition, she made clear during her deposition that she does not intend to opine on the applicable legal standards or provide legal conclusions; instead, she is “here to document what the software does, what type of data it collects.”<sup>27</sup>

Second, Frederiksen-Cross’s use of the terms “infringement” and “repeat infringement” is legally correct. As explained in Plaintiffs’ Opposition to Grande’s Motion to Exclude Robert A. Bardwell’s testimony, offering to distribute recordings through online file sharing is copyright infringement, and Rightscorp detects that activity.<sup>28</sup> The authorities cited by Grande, which it cited in its motion to exclude Dr. Bardwell’s testimony, are entirely beside the point.<sup>29</sup>

Third, Frederiksen-Cross testified extensively at the *Cox* trial using the terms “infringement,” and its variants, when describing the Rightscorp system and its notices.<sup>30</sup> On appeal, the Fourth Circuit ruled that the district court did not abuse its discretion by permitting this testimony because “the court clearly and carefully instructed the jurors that they alone could determine infringement.” *BMG Rights Mgt. (US) LLC v. Cox Commc’ns, Inc.*, 881 F.3d 293, 314 (4th Cir. 2018). By seeking to exclude Frederiksen-Cross’s substantive testimony, Grande greatly overreaches—as it does with Dr. Bardwell. If Grande’s motion had any merit (and it does not), the straightforward remedy would be simply to instruct Frederiksen-Cross to use alternate terms where possible, and to instruct the jury, as the *Cox* court did, that her use of the term infringement

---

<sup>25</sup> Ex. 1, F-C Rpt. ¶¶ 56, 71.

<sup>26</sup> Ex. 2, F-C Dep. 133:19-134:3 (“I haven’t really relied on those legal understandings to perform my analysis.”); *see also* 136:2-16.

<sup>27</sup> *Id.* at 88:22-89:25; *see also id.* at 88:9-21, 134:24-135:12, 135:14-136-1.

<sup>28</sup> Pls’ Response in Opp. To Mot. to Exclude Testimony of Robert A. Bardwell at 6-7 [Dkt. 213]; *see also* Pls’ Response in Opp. to Mot. and Cross-Mot. for Summ. J. at 11-13 [Dkt. 172]; Pls’ Reply ISO Cross-Mot. for Summ. J. at 2-3 [Dkt. 209].

<sup>29</sup> Pls’ Response in Opp. To Mot. to Exclude Testimony of Robert A. Bardwell at 6-7 [Dkt. 213].

<sup>30</sup> *See, e.g.*, Ex. 4, *Cox* Trial Tr. at 275:25-276:4, 299:6-20, 301:7-302:3, 308:4-9, 315:11-316:11, 330:1-331:5, 335:11-336:10.

is not determinative of the ultimate legal issue.<sup>31</sup>

#### **IV. FREDERIKSEN-CROSS'S UNDISPUTED BACKGROUND TESTIMONY REGARDING BITTORRENT'S BASIC FUNCTIONING SHOULD NOT BE EXCLUDED.**

Although Grande has not identified any errors or misstatements in Frederiksen-Cross's report about BitTorrent's basic functioning, Grande argues that she cannot provide those undisputed background facts, because she supposedly lacks expertise concerning BitTorrent. Mot. 8-10. This hollow argument should be rejected. First, Frederiksen-Cross is, as Grande admits, a skilled computer programmer. Mot. at 9. She is an expert in software design and development with 44 years of experience in the computer industry, who has worked on an extraordinary variety of computer software and systems. As she explained in her reports and at her deposition, she has researched BitTorrent, reviewed BitTorrent source code in connection with a paper she authored, and analyzed internet traffic related to BitTorrent as part of her testing.<sup>32</sup>

Second, when Frederiksen-Cross explains how her testing confirmed that Rightscorp detects copyright infringement on BitTorrent, she should also be able to explain what BitTorrent is and how it functions, including how it enables file sharing, how it searches for files on other users' machines, and how it downloads and uploads files.<sup>33</sup> Those concepts are necessary background to understand her analysis—not “opinions”—and without those basic facts, the jury

---

<sup>31</sup> *Id.* at Trial Tr. 337:18-338:9 (jury instruction).

<sup>32</sup> Ex. 1, F-C Rpt. Ex. A at 5; Ex. 2, Dep. Tr. 38:11-39:1, 45:21-46:16. Grande asserts that it was unable to “meaningfully cross examine” Frederiksen-Cross at her deposition because she did not identify every last source of her BitTorrent knowledge. Mot at 9 n.4. That claim is incorrect. Grande had every opportunity to question Frederiksen-Cross about the content of Frederiksen-Cross's proposed testimony on BitTorrent, but neither Grande's motion nor its putative expert identifies an error or misstatement in that testimony. Nor does Grande point to any authority requiring an expert to disclose every source of learning that contributed to her expertise, which is not surprising, as such a standard would be unworkable.

<sup>33</sup> This uncontroversial background testimony is therefore entirely unlike *Marsteller v. Stanley Works*, 2010 WL 11571038, at \*2 (W.D. Tex. Aug. 26, 2010), Mot. at 9, a product liability case where the court excluded testimony from a NASA scientist about the central issue at stake—the safety features of a commercially available finish nailer (*i.e.*, a “nail gun”).

will not be able to understand her analysis. This is why courts routinely reach the commonsense conclusion that experts may describe factual background necessary for their opinions. *See, e.g., Nunn v. State Farm Mut. Auto. Ins. Co.*, No. 3:08-CV-1486-D, 2010 WL 2540754, at \*12 (N.D. Tex. June 22, 2010) (allowing expert testimony about background information). Indeed, at the *Cox* trial, Frederiksen-Cross testified at length on all of these background facts.<sup>34</sup> Her background testimony on BitTorrent is squarely within her expertise and should be admitted.

#### **V. FREDERIKSEN-CROSS'S REBUTTAL REPORT IS ENTIRELY PROPER.**

Finally, Grande repeats the arguments from its motion to strike Frederiksen-Cross's rebuttal report as procedurally improper "sandbagging." Mot. at 10. For the reasons set forth in Plaintiffs' opposition to that motion, those arguments fail. In short, (1) the scheduling order expressly states that Plaintiffs may file rebuttal reports;<sup>35</sup> (2) the opinions in Frederiksen-Cross's rebuttal report directly respond to criticisms from Grande's putative expert, which is the very purpose of a rebuttal report;<sup>36</sup> (3) her citation to over 59,000 audio files downloaded from Grande subscribers could not have been a surprise because that evidence was produced months before her report and was expressly referenced in Plaintiffs' complaint and discovery responses;<sup>37</sup> and (iv) Frederiksen-Cross expressly discusses the downloaded files in her initial report, as does Grande's proffered expert.<sup>38</sup> Grande cannot credibly argue that it was "sandbagged."

### **CONCLUSION**

Plaintiffs respectfully request that the Court deny Grande's motion in its entirety.

---

<sup>34</sup> Ex. 4, *Cox* Trial Tr. 271:17-291:24.

<sup>35</sup> Pls.' Opp. to Grande's Mot. to Exclude Rebuttal Expert Rpt. 2-4 [Dkt. 188].

<sup>36</sup> *Id.* at 5-7.

<sup>37</sup> *Id.* at 7-8.

<sup>38</sup> Ex. 1, F-C Rpt. ¶¶ 60-64, 122, 124.

Dated: November 8, 2018

Respectfully submitted,

By: /s/ Robert B. Gilmore

Jonathan E. Missner (admitted *pro hac vice*)

Robert B. Gilmore (admitted *pro hac vice*)

Philip J. O'Beirne (admitted *pro hac vice*)

Michael A. Petrino (admitted *pro hac vice*)

**Stein Mitchell Cipollone Beato & Missner LLP**

901 15th Street, N.W., Suite 700

Washington, DC 20005

Telephone: (202) 737-7777

Facsimile: (202) 296-8312

jmissner@steinmitchell.com

rgilmore@steinmitchell.com

pobeirne@steinmitchell.com

mpetrino@steinmitchell.com

Daniel C. Bitting (State Bar No. 02362480)

Paige A. Amstutz (State Bar No. 00796136)

**Scott Douglass & McConnico LLP**

303 Colorado Street, Suite 2400

Austin, TX 78701

Telephone: (512) 495-6300

Facsimile: (512) 495-6399

dbitting@scottdoug.com

pamstutz@scottdoug.com

***Attorneys for Plaintiffs***

**CERTIFICATE OF SERVICE**

The undersigned certifies that on November 8, 2018 all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system pursuant to Local Rule CV-5(b)(1).

/s/ Daniel C. Bitting  
Daniel C. Bitting